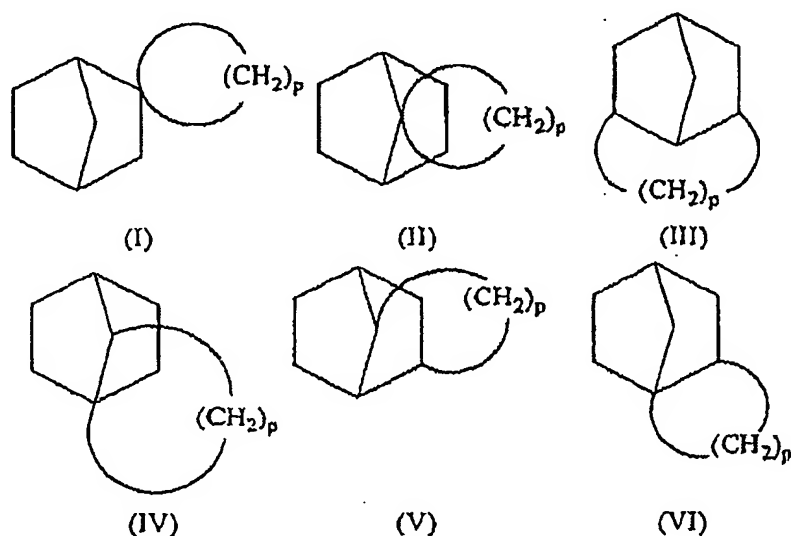


## CLAIMS

1. A lube base oil characterized in that the lube base oil comprises at least one hydrocarbon compound having, as a basic skeleton, a structure represented by any of the general formulas (I) to (VI) shown below and has a viscosity at  $-40^{\circ}\text{C}$  of 40 Pa's or lower and a viscosity index of 80 or higher

[1]

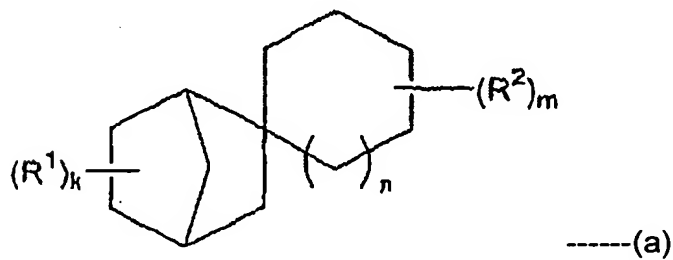


wherein  $p$  is an integer of 1 to 10 with the proviso that, in the formulas (I) and (II),  $p$  is not 1.

2. A lube base oil as recited in claim 1 and having a viscosity at  $-40^{\circ}\text{C}$  of 35 Pa's or lower.

3. A lube base oil as recited in claim 1 or 2; wherein the hydrocarbon compound having, as a basic skeleton, the structure represented by the general formula (I) is a hydrocarbon compound which has 12 to 24 carbon atoms and which is represented by the following general formula (a):

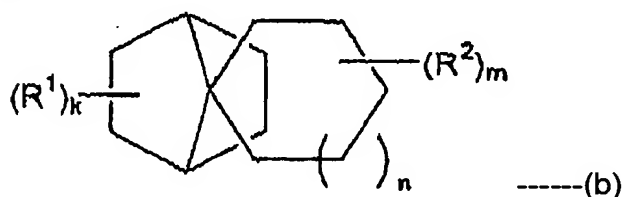
[2]



wherein k, m and n are each an integer of 0 to 6 with the proviso that k+m is an integer of 0 to 6, and R<sup>1</sup> and R<sup>2</sup> each represent an alkyl group having 1 to 4 carbon atoms or a cycloalkyl group having 5 to 12 carbon atoms.

4. A lube base oil as recited in claim 1 or 2, wherein the hydrocarbon compound having, as a basic skeleton, the structure represented by the general formula (II) is a hydrocarbon compound which has 12 to 24 carbon atoms and which is represented by the following general formula (b):

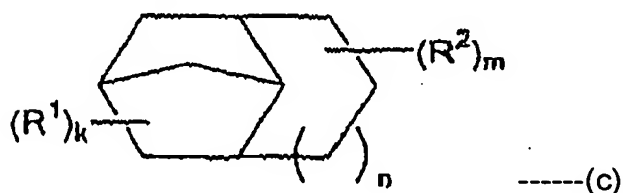
[3]



wherein k, m and n are each an integer of 0 to 6 with the proviso that k+m is an integer of 0 to 6, and R<sup>1</sup> and R<sup>2</sup> each represent an alkyl group having 1 to 4 carbon atoms or a cycloalkyl group having 5 to 12 carbon atoms.

5. A lube base oil as recited in claim 1 or 2, wherein the hydrocarbon compound having, as a basic skeleton, the structure represented by the general formula (III) is a hydrocarbon compound which has 12 to 24 carbon atoms and which is represented by the following general formula (c):

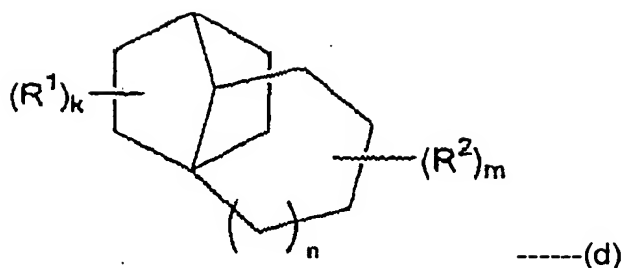
[4]



wherein k, m and n are each an integer of 0 to 6 with the proviso that k+m is an integer of 0 to 6, and R<sup>1</sup> and R<sup>2</sup> each represent an alkyl group having 1 to 4 carbon atoms or a cycloalkyl group having 5 to 12 carbon atoms.

6. A lube base oil as recited in claim 1 or 2, wherein the hydrocarbon compound having, as a basic skeleton, the structure represented by the general formula (IV) is a hydrocarbon compound which has 12 to 24 carbon atoms and which is represented by the following general formula (d):

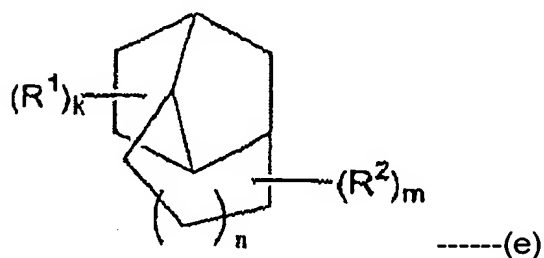
[5]



wherein  $k$ ,  $m$  and  $n$  are each an integer of 0 to 6 with the proviso that  $k+m$  is an integer of 0 to 6, and  $R^1$  and  $R^2$  each represent an alkyl group having 1 to 4 carbon atoms or a cycloalkyl group having 5 to 12 carbon atoms.

7. A lube base oil as recited in claim 1 or 2, wherein the hydrocarbon compound having, as a basic skeleton, the structure represented by the general formula (V) is a hydrocarbon compound which has 12 to 24 carbon atoms and which is represented by the following general formula (e):

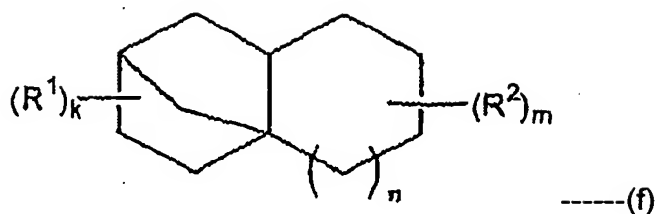
[6]



wherein  $k$ ,  $m$  and  $n$  are each an integer of 0 to 6 with the proviso that  $k+m$  is an integer of 0 to 6, and  $R^1$  and  $R^2$  each represent an alkyl group having 1 to 4 carbon atoms or a cycloalkyl group having 5 to 12 carbon atoms.

8. A lube base oil as recited in claim 1 or 2, wherein the hydrocarbon compound having, as a basic skeleton, the structure represented by the general formula (VI) is a hydrocarbon compound which has 12 to 24 carbon atoms and which is represented by the following general formula (f):

[7]

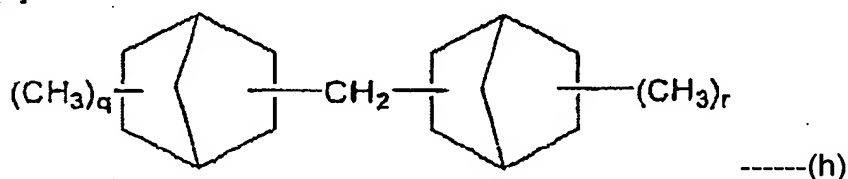


wherein k, m and n are each an integer of 0 to 6 with the proviso that k+m is an integer of 0 to 6, and R<sup>1</sup> and R<sup>2</sup> each represent an alkyl group having 1 to 4 carbon atoms or a cycloalkyl group having 5 to 12 carbon atoms.

9. A lubricating oil composition characterized in that the lubricating oil composition comprises at least one hydrocarbon compound of any of the above general formulas (a) to (f), and a synthetic traction base oil which is other than said compound and which has an alicyclic structure, and in that the composition has a viscosity at -40°C of 40 Pa's or lower and a viscosity index of 80 or higher.

10. A lubricating oil composition as recited in claim 9, wherein the synthetic traction base oil having an alicyclic structure is a hydrocarbon which has 16 to 20 carbon atoms and which is represented by the following general formula (h):

[8]



wherein q is an integer of 1 or 2 and r is an integer of 2 or 3.

11. A lubricating oil composition as recited in claim 9, wherein the synthetic traction base oil having an alicyclic structure is 2,4-dicyclohexyl-2-methylpentane.

12. A lubricating oil composition as recited in claim 9, wherein the synthetic traction base oil having an alicyclic structure is 2,3-dicyclohexyl-2,3-dimethylbutane.

13. A lubricating oil composition comprising a lube base oil or a lubricating oil composition as recited in any one of claims 1 to 12, and, compounded therein, at least one additive selected from the group consisting of an antioxidant, a viscosity index improver, a detergent dispersant, a friction reducing agent, a metal

deactivator, a pour point depressant, an abrasion proof agent, an antifoaming agent and an extreme pressure agent.

14. A fluid for traction drive, comprising a lube base oil or a lubricating oil composition as recited in any one of claims 1 to 13.